

### REMARKS

Claims 1-35 are currently pending in the subject application and are presently under consideration. Claims 1-3, 5-7, 11, 15-16, and 24-25 have been amended as shown on pp. 2-5 of the Reply. Claims 4, 8-10, 12-14, 18-23, and 26-35 have been canceled. New claims 36-43 have been added.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Rejection of Claims 1-19, 21-23, and 35 Under 35 U.S.C. § 102(e)**

Claims 1-19, 21-23, and 35 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Arora *et al.* (U.S. Patent Publication No. 2004/0064568). This rejection should be withdrawn for at least the following reason: claims 4, 8-10, 12-14, 18, 21-23 and 35 are canceled herein, and Arora *et al.* does not disclose or suggest each and every feature recited in the subject claims. The claimed subject matter is directed to simulating synchronous processing of a web-based request received by a client by dynamically allocating parts of the web-based request among processing engines. For example, subscribed process engines can compete for processing the web-based request and/or portions thereof, and a query management component can facilitate distributing the web-based request across one or more competing process engines. In another example, the query management component can facilitate detecting processing engine computing power, capacity, present load, and expected future load. This information can be employed to determine which processing engine(s) should contribute in processing the web-based request. In yet another example, the web-based request can be parsed among process engines for asynchronous processing based on a predicted load of the respective process engines. (See *e.g.* applicants' specification at paragraphs 10, 13, 33, and 54). To this end, independent claim 1, as amended, recites ***an interface component that receives a web-based request and synchronously returns a result based on the web-based request; a query management component that determines available processing engine computing capacity and predicts future processing engine capacity; a processing component that allocates parts of the web-based request among processing engines based on the determined and predicted processing engine capacity and derives the result by aggregating processing engine results.***

Arora *et al.* is directed to a distributed index mechanism for indexing and searching for content in peer-to-peer networks. To this end, Arora *et al.* discloses peers with sufficient storage capacity may be able to participate in a distributed index. The content can include text documents, and search queries may include one or more terms from the text documents. In one example, the distributed index can be a distributed hash table, with participating peers responsible for a range of values of hashes that may be generated by a hash function. (See Arora *et al.* at paragraph 64). Although Arora *et al.* further discloses the peer-to-peer networks can be designed to interoperate with and be compatible with various web service standards (see Arora *et al.* at paragraph 279), applicants' representative respectfully submits that Arora *et al.* fails to disclose or suggest ***an interface component that receives a web-based request and synchronously returns a result based on the web-based request; a query management component that determines available processing engine computing capacity and predicts future processing engine capacity; a processing component that allocates parts of the web-based request among processing engines based on the determined and predicted processing engine capacity and derives the result by aggregating processing engine results.***

Dependent claim 11, as amended, recites ***an error-handling component that notifies a client associated with the web-based request that processing of the web-based request halted due to a time period lapse.*** Contrary to assertions made in the Final Office Action, it is respectfully submitted that Arora *et al.* fails to disclose or suggest notifying a client when the client's web-based request halted due to a lapse in time. Instead, Arora *et al.* merely provides that advertisements sent to peers include time-to-live indicators indicating a time during which peers can view the advertisements - the peers recited in Arora *et al.* do not issue web-based requests, and do not receive notification when such requests are halted.

Independent claim 15, as amended, recites ***a query management component that: receives a web-based request from a client and publishes the web-based request in a queue; an asynchronous processing component that: detects available processing engine capacity; predicts future processing engine capacity; and distributes portions of the web-based request among processing engines based on the detected and predicted processing engine capacity; an error handling component that automatically conveys one or more portions of the web-based request associated with a failed processing engine to another processing engine, wherein the client is not informed of a processing failure; a process engine component that groups***

*processing engine results; and an output component that returns the grouped processing engine results synchronous with the web-based request.* Although Arora *et al.* provides for routing queries and providing asynchronous pipes as primary channels for communication among peers (see Arora *et al.* at paragraphs 210-214 and 74-79), applicants' representative respectfully submits that Arora *et al.* fails to disclose or suggest the novel features recited in claim 15.

Dependent claim 16, as amended, recites *an adapter that translates the web-based request received via TCP/IP, IPX/SPX, UDP/IP, HTTP, SOAP, or a proprietary synchronous protocol and conveys the translated web-based request to the processing engine component through an application processing interface (API).* It is readily apparent that Arora *et al.* fails to disclose or suggest *an adapter that translates the web-based request received via TCP/IP, IPX/SPX, UDP/IP, HTTP, SOAP, or a proprietary synchronous protocol and conveys the translated web-based request to the processing engine component through an application processing interface (API).* Rather, Arora *et al.* merely discloses peers can obtain information from neighboring peers that have cached the information. (See Arora *et al.* at paragraph 146).

In view of at least the foregoing, it is readily apparent that Arora *et al.* does not disclose or suggest each and every features of the claimed subject matter as recited in independent claims 1 and 15 (and associated dependent claims). Accordingly, withdrawal of this rejection is respectfully requested.

## **II. Rejection of Claims 24-34 Under 35 U.S.C. § 102(e)**

Claims 24-34 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Tripp *et al.* (U.S. Patent No. 6,516,337). This rejection should be withdrawn for at least the following reason: claims 26-35 are canceled herein, and Tripp *et al.* does not disclose or suggest each and every feature recited in the subject claims. Independent claim 24, as amended, recites *simulating synchronous processing of a web-based request received by a client by dynamically allocating parts of the web-based request among processing engines based on present and predicted loading of the processing engines; maintaining an association between parts of the web-based request; grouping asynchronous results returned by the processing engines into a final result based on the maintained association between the parts of the web-based request; and returning the final result to the client in a synchronous manner.* Tripp *et al.* is directed to

indexing the internet. Although Tripp *et al.* discloses directing packets comprising search requests through a load balancing switch that balances traffic to all web servers (*see* Tripp *et al.* at col. 9, lines 11-29; col. 17, lines 47-64), applicants' representative respectfully submits that Tripp *et al.* fails to disclose or suggest the novel features recited in claim 24.

Dependent claim 25, as amended, recites ***publishing the web-based request in a message queue; subscribing processing engines with the message queue; and enabling subscribed processing engines to compete for processing portions of the web-based request.***

Counter to intimations in the Final Office Action that Tripp *et al.* discloses the claimed, it is readily apparent that ***publishing the web-based request in a message queue; subscribing processing engines with the message queue; and enabling subscribed processing engines to compete for processing portions of the web-based request*** is neither disclosed nor suggested by the cited art. Instead, Tripp *et al.* merely discloses construction of meta indexes containing lists of URLs. (*See* Tripp *et al.* at col. 26, lines 57-59).

In view of at least the foregoing, it is readily apparent that Tripp *et al.* does not disclose or suggest each and every features of the claimed subject matter as recited in independent claim 24 (and associated dependent claims). Accordingly, withdrawal of this rejection is respectfully requested.

### **III. Rejection of Claim 20 Under 35 U.S.C. § 103(a)**

Claim 20 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Arora *et al.* in view of Tripp *et al.* Withdrawal of this rejection is respectfully requested in light of claim 20 canceled herein.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP505US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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